



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,638	03/05/2002	Richard A. Bardini	SONY-16000	9147

28960 7590 10/18/2010
HAVERSTOCK & OWENS LLP
162 N WOLFE ROAD
SUNNYVALE, CA 94086

EXAMINER

PATEL, CHANDRAHAS B

ART UNIT	PAPER NUMBER
----------	--------------

2464

MAIL DATE	DELIVERY MODE
-----------	---------------

10/18/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/091,638	Applicant(s) BARDINI ET AL.	
	Examiner Chandrabhas Patel	Art Unit 2464	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,7,12-17,19,20,22-24,28-30,32,33,38-42 and 47-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5,20,22,29,30 and 50-61 is/are allowed.
- 6) ☒ Claim(s) 7, 12-17, 19, 23, 24, 28, 32, 33, 38-42, 47-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/31/2008 has been entered.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 7, 12-17, 19, 23, 24, 28, 32, 33, 38-42, 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ghodrat et al. (USPN 6,717,947) in view of Dejanovic et al. (USPN 7,046,627).

Regarding claim 7, Ghodrat teaches a method of performing retransmission and flow control comprising [Abstract]: a. configuring a back channel between a transmitting device and a receiving device for providing retransmission and flow control information from the receiving device to the transmitting device related to a stream of isochronous data packets transmitted from the transmitting device to the source device [Col. 5, lines 18-20]; b. monitoring the stream of isochronous data packets received at the receiving device for necessary retransmission or flow control [Col. 6, lines 16-19]; c. configuring a back channel packet for indicating a retransmission or flow control function to perform

[Fig. 3, 210]; d. transmitting the back channel packet from the receiving device to the transmitting device over the back channel [Col. 7, lines 36-41].

However, Ghodrat does not teach the back channel packet includes a control instruction that instructs the transmitting device to stop transmitting the stream of isochronous data packets.

Dejanovic teaches the back channel packet includes a control instruction that instructs the transmitting device to stop transmitting the stream of isochronous data packets [Col. 9, lines 40-42, 58-64, lines 58-64 teach the control instruction is sent through back channel].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to stop transmitting data packets if congestion occurs [Col. 9, lines 40-42].

Regarding claim 12, Ghodrat teaches a method of performing retransmission and flow control comprising [Abstract]: a. configuring an isochronous back channel between a transmitting device and a receiving device as an isochronous back channel for providing retransmission and flow control information from the receiving device to the transmitting device related to a stream of isochronous data packets transmitted from the transmitting device to the source device [Col. 5, lines 18-20]; b. monitoring the stream of isochronous data packets received at the receiving device for necessary retransmission or flow control [Col. 6, lines 16-19]; c. configuring an isochronous back channel packet for indicating a retransmission or flow control function to perform [Fig. 3, 210]; d.

transmitting the isochronous back channel packet from the receiving device to the transmitting device over the isochronous back channel [Col. 7, lines 36-41].

However, Ghodrat does not teach the back channel packet includes a control instruction that instructs the transmitting device to stop transmitting the stream of isochronous data packets.

Dejanovic teaches the back channel packet includes a control instruction that instructs the transmitting device to stop transmitting the stream of isochronous data packets [Col. 9, lines 40-42, 58-64, lines 58-64 teach the control instruction is sent through back channel].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to stop transmitting data packets if congestion occurs [Col. 9, lines 40-42].

Regarding claim 13, Ghodrat teaches configuring a transmitting plug on the receiving device for transmitting the isochronous back channel packet over the isochronous back channel and configuring a receiving plug on the transmitting device for receiving the isochronous back channel packet over the isochronous back channel [Col. 5, lines 33-39, IEEE 1394 is isochronous bus where 40 is configured to bidirectional communication].

Regarding claims 14, 33, 42, Ghodrat teaches the stream of isochronous data packets is transmitted in non real-time [Col. 5, lines 40-41, asynchronous communication is not done in real-time].

Regarding claim 15, Ghodrat teaches the isochronous back channel packet includes a control instruction that instructs the transmitting device to reset transmission of the stream of isochronous data packets starting from a specified packet within the stream of isochronous data packets [Col. 7, lines 36-53, 65-67, – Col. 8, lines 1-9, sequence number field identified the specified packet from the stream of data packets].

Regarding claim 16, Ghodrat teaches the isochronous back channel packet includes a dbc field that identifies the specific packet within the stream of isochronous data packets [Col. 7, lines 36-43, sequence number field identifies the packet].

Regarding claim 17, Ghodrat teaches the isochronous back channel packet includes a control field that contains a value corresponding to the control instruction [Col. 7, lines 36-41, retry packet contains the instruction].

Regarding claims 19, 38, 47, Ghodrat teaches the stream of isochronous data packets include audio/visual content data [Col. 2, lines 22-29, 38-39].

Regarding claim 23, Ghodrat teaches a method of transmitting flow control and retransmission information [Abstract] comprising: a. configuring a transmitting plug on a receiving device for transmitting an isochronous back channel packet over an isochronous channel via the transmitting plug to a transmitting device [Col. 5, lines 33-39]; b. determining flow control and retransmission information based on the status of a received isochronous data packet at the receiving device, wherein the received isochronous data packet is one of a stream of isochronous data packets transmitted from the transmitting device to the receiving device, [Fig. 3, 210]; c. packetizing flow control and retransmission information within the isochronous back channel packet [Col.

5, lines 61-63]; and d. transmitting the isochronous back channel packet from the receiving device over the isochronous back channel via the transmitting plug [Col. 7, lines 36-41].

However, Ghodrat does not teach the status of the received isochronous data packet indicates the receiving device is not capable of receiving the stream of isochronous data packets and instructs the transmitting device to stop transmitting the stream of isochronous data packets.

Dejanovic teaches the status of the received isochronous data packet indicates the receiving device is not capable of receiving the stream of isochronous data packets and instructs the transmitting device to stop transmitting the stream of isochronous data packets [Col. 9, lines 40-42, 58-64, lines 58-64 teach the received data packet indicates about receiving device].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to stop transmitting data packets if congestion occurs [Col. 9, lines 40-42].

Regarding claim 24, Ghodrat teaches a method of transmitting flow control and retransmission information [Abstract] comprising: a. configuring a transmitting plug on a receiving device for transmitting an isochronous back channel packet over an isochronous channel via the transmitting plug to a transmitting device [Col. 5, lines 33-39]; b. determining flow control and retransmission information based on the status of a received isochronous data packet at the receiving device, wherein the received isochronous data packet is one of a stream of isochronous data packets transmitted

from the transmitting device to the receiving device [Fig. 3, 210]; c. packetizing flow control and retransmission information within the isochronous back channel packet [Col. 5, lines 61-63]; and d. transmitting the isochronous back channel packet from the receiving device over the isochronous back channel via the transmitting plug [Col. 7, lines 36-41].

However, Ghodrat does not teach the status of the received isochronous data packet indicates that the receiving device is capable of resuming reception of the stream of isochronous data packets and instructs the transmitting device to restart transmission of the stream of isochronous data packets starting from a specified packet within the stream of isochronous data packets.

Dejanovic teaches the status of the received isochronous data packet indicates that the receiving device is capable of resuming reception of the stream of isochronous data packets and instructs the transmitting device to restart transmission of the stream of isochronous data packets starting from a specified packet within the stream of isochronous data packets [Col. 13, lines 49-54].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to start from a specified a packet from the stream so that a view of traffic condition can be efficiently produced [Col. 6, lines 13-20].

Regarding claim 28, Ghodrat teaches a method of receiving flow control and retransmission information [Abstract] comprising: a. configuring a receiving plug on a transmitting device for receiving an isochronous back channel packet from a receiving device, wherein the isochronous back channel packet is received over an isochronous

channel via the receiving plug [Col. 5, lines 33-39]; b. receiving the isochronous back channel packet via the receiving plug [Col. 6, lines 16-19]; c. reading flow control and retransmission information included within the isochronous back channel packet wherein the flow control and retransmission information relates to a stream of isochronous data packets transmitted from the transmitting device to the receiving device and provides a control instruction to the transmitting device to regulate transmission of the stream of isochronous data packets [Fig. 3, 210].

However, Ghodrat does not teach regulating transmission of the stream of isochronous data packets as determined by the control instruction, wherein the control instruction instructs the transmitting device to stop transmitting the stream of isochronous data packets.

Dejanovic teaches regulating transmission of the stream of isochronous data packets as determined by the control instruction, wherein the control instruction instructs the transmitting device to stop transmitting the stream of isochronous data packets [Col. 9, lines 40-42, 58-64].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to stop transmitting data packets if congestion occurs [Col. 9, lines 40-42].

Regarding claim 32, Ghodrat teaches an apparatus for communicating flow control and retransmission information [Fig. 1] comprising: a. a configuring circuit to configure a plug to communicate an isochronous back channel packet over an isochronous back channel [Col. 5, lines 33-39]; b. a packetizing circuit to packetize flow

control and retransmission information within the isochronous back channel packet [Col. 5, lines 61-63]; c. a transceiver circuit configured to communicate the isochronous back channel packet via the plug [Fig. 1, 25]; d. a de-packetizing circuit to extract the flow control and retransmission information from the isochronous back channel packet [Col. 7, lines 43-49]; and e. a controller coupled to the configuring circuit, the packetizing circuit, the transceiver circuit, and the de-packetizing circuit to determine a control instruction and a stream of isochronous data packets to which the control instruction is applied from the flow control and retransmission information and apply the control instruction to the determined stream of isochronous data packet [Col. 7, lines 65-67 – Col. 8, lines 1-9].

However, Ghodrat does not teach the control instruction is an indication to stop transmitting the stream of isochronous data packets.

Dejanovic teaches the control instruction is an indication to stop transmitting the stream of isochronous data packets [Col. 9, lines 40-42, 58-64].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to stop transmitting data packets if congestion occurs [Col. 9, lines 40-42].

Regarding claims 39, 40, 48, 49, Ghodrat teaches the transceiver circuit is configured to receive and transmit isochronous data packets in non real-time via the plug [Fig. 1, 25 transmits and receives, Col. 5, lines 40-41, asynchronous communication is not done in real-time].

Regarding claim 41, Ghodrat teaches an apparatus for communicating flow control and retransmission information [Fig. 1] comprising: a. means for configuring a plug to communicate an isochronous back channel packet over an isochronous back channel [Col. 5, lines 33-39]; b. means for packetizing flow control and retransmission information within the isochronous back channel packet [Col. 5, lines 61-63]; c. means for communicating the isochronous back channel packet via the plug [Fig. 1, 25]; d. means for extracting the flow control and retransmission information from the isochronous back channel packet [Col. 7, lines 43-49]; and e. means for controlling coupled to the means for configuring, the means for packetizing, the means for communicating, and the means for de-packetizing, wherein the means for controlling determines a control instruction and a stream of isochronous data packets to which the control instruction is applied from the flow control and retransmission information and applies the control instruction to the determined stream of isochronous data packets [Col. 7, lines 65-67 – Col. 8, lines 1-9].

However, Ghodrat does not teach the control instruction is an indication to stop transmitting the stream of isochronous data packets.

Dejanovic teaches the control instruction is an indication to stop transmitting the stream of isochronous data packets [Col. 9, lines 40-42, 58-64].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to stop transmitting data packets if congestion occurs [Col. 9, lines 40-42].

Allowable Subject Matter

4. Claims 5, 20, 22, 29, 30, 50-61 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 5, 20, 22, 29, 30, 50-61, the references fail to teach resetting transmission to re-start from the specified packet, such that the specified packet and packets after the specified packet within the stream of isochronous data packets are transmitted and reading flow control and retransmission information included within the isochronous back channel packet wherein the flow control and retransmission information relates to a stream of isochronous data packets transmitted from the transmitting device to the receiving device and provides a control instruction to the transmitting device to regulate transmission of the stream of isochronous data packets, wherein the control instruction instructs the transmitting device to reset transmission of the stream of isochronous data packets starting from a specified packet within the stream of isochronous data packets, such that the specified packet and packets after the specified packet within the stream of isochronous data packets are transmitted.

This taken with other limitations of the claim and dependent claims is considered novel and non-obvious.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrahas Patel whose telephone number is

Application/Control Number:
10/091,638
Art Unit: 2464

Page 12

(571)270-1211. The examiner can normally be reached on Monday through Thursday 7:30 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art
Unit 2464

/Chandrabhas Patel/
Examiner, Art Unit 2464